

WHAT WE CLAIM IS:

-1. A computerized method of individually selecting which messages to show on each of one or more electronic displays comprising:

- for each of a plurality of messages which are to be shown on said displays, calculating a desired display rate as a function of a desired number of exposures of such messages to be made within a remaining period of time;
- selecting which of possible messages to show on an individual display at a given time as a function of the relative values of the desired display rates associated with different messages, so as to favor the selection of messages having a higher desired display rate; and
- using information that a given message has been selected to be shown on a given display to update the calculation of the desired display rate for given message by decreasing the number of showings of the given message which are to be made in a remaining period of time associated with the message.

-2. A computerized method as in Claim 1 wherein said electronic displays are publicly visible displays.

-3. A computerized method as in Claim 1 wherein said number of exposures used in calculating the desired display rate for a given message is a function, not only of the number of showings of the given message on one or more individual displays, but also of the variable number of people estimated to have had an opportunity to see each such showing of the given message.

-4. A computerized method as in Claim 3 wherein said number of people estimated to have had an opportunity to see each showing

of a given message is a number of one or more particular types of people.

-5. A computerized method as in Claim 4 wherein said number of one or more particular types of people estimated to have had an opportunity to see an individual showing of a given message on a given display is determined, at least in part, by a computerized estimate of the number of one or more particular types of people in a location associated with the given display based on sensor information received from that location within an hour of the showing of the message.

-6. A computerized method as in Claim 4 wherein said number of one or more particular types of people estimated to have had an opportunity to see a given showing of a given message on a given display is determined, at least in part, by using a computerized database which stores estimates of the number a plurality of different types of people in each of a plurality of location at each of a plurality of times, to produce said estimate of the number of one or more particular types of people who have had an opportunity to see the given showing of the given message as a function of the location and time of the given showing.

-7. A computerized method as in Claim 3 wherein said electronic displays are publicly visible displays.

-8. A computerized method as in Claim 3 wherein said number of people estimated to have had an opportunity to see an individual showing of a given message on a given display is determined, at least in part, by a computerized estimate of a number of people in a location associated with the display based on sensor information received from that location within an hour of the showing of the message.

-10. A computerized method as in Claim 1 wherein the selecting of which of possible messages to show on a given individual display is performed not only as a function of the relative values of the desired display rate associated with different messages, but also as a function of the match between:

- values for one or more criteria which vary as a function of the location of the given display; and
- desired values of those one or more criteria associated with individual messages.

-11. A computerized method as in Claim 10 wherein said one or more criteria include demographic criteria concerning a number of people of a given demographic category available to view a given showing of a message at the location of the given display.

-12. A computerized method as in Claim 11:

- wherein said given displays is a publicly visible display mounted on a vehicle; and
- further including:
  - determining a temporary indication of the vehicle's location as it moves;
  - using the vehicle's temporary location to access a demographic database containing information on a number of people of a given demographic category available to view a showing of a message at each of a plurality of different locations, to select demographic information on the number of people of a given demographic category available to view a showing of a message at the vehicle's temporary location;
  - using the selected demographic information to determine which messages to show on the vehicle mounted display when it is in the temporary location.

-13. A computerized method of individually selecting which messages to show on each of a one or more electronic display comprising:

- for each of a plurality of messages which are to be shown on said displays, calculating a desired display rate as a function of a desired number of exposures of such messages to be made to one or more particular types of people within a remaining period of time;
- for each of different individual opportunities to show a message on a given display at a given time, determining a corresponding estimate of the number of one or more different types of people available to see a message shown in that display opportunity, said number being determined from a set of three or more possible numerical values;
- selecting which of said plurality of messages to show for a given display opportunity as a function of both the estimate of the number of one or more different types of people available to see a message shown for that display opportunity, and the display rates of exposures to one or more different types of people associated with different messages; and
- using information that a given message has been selected to be shown for a given display opportunity to update the calculation of the display rate for the given message by decreasing the display rate's associated number of exposures to be made to one or more given types of people by the number of those one or more different types of people estimated to be available to see the messages shown during the given display opportunity.

-14. A computerized method as in Claim 13 wherein said number of one or more particular types of people estimated to have an

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opportunity to see an individual showing of a given message on a given display is determined, at least in part, by a computerized estimate of the number of one or more particular types of people in a location associated with the given display based on sensor information received from that location within an hour of the showing of the message.

-15. A computerized method as in Claim 13 wherein said number of one or more particular types of people estimated to have an opportunity to see a given showing of a given message on a given display is determined, at least in part, by using a computerized database which stores estimates of the number of a plurality of different types of people in each of a plurality of location at each of a plurality of times, to produce said estimate of the number of one or more particular types of people who have an opportunity to see the given showing of the given message as a function of the location and time of the given showing.

-16. A computerized method as in Claim 13 wherein said electronic displays are publicly visible displays.

-17. A computerized method as in Claim 16:

-wherein said given displays is a publicly visible display mounted on a vehicle; and

-further including:

--determining a temporary location of the vehicle as it moves;

--using the vehicle's temporary location to access a demographic database containing information on the number of people of a given demographic category available to view a showing of a message at each of a plurality of different locations, to select demographic information on the number

of people of a given type available to view a showing of a message at the vehicle's temporary location;  
--using the selected demographic information in determining which messages to show on the vehicle mounted display when in the temporary location.

- 18. A computerized method of individually selecting which messages to show on each of one or more electronic displays having different physical locations, said method comprising:
- storing for each of a plurality of messages one or more criteria desired for showings of said message;
  - obtaining information regarding the values for said criteria associated the opportunity to show a message on a given display at a given time, including obtaining values for one or more of said criteria as a function of physical location of the given display;
  - calculating a score as a function of the match between the criteria associated with each of said plurality of messages and the values for such criteria associated with said given display opportunity; and
  - automatically selecting which of said messages to show in a given display opportunity as a function of the relative values of said scores calculated for said messages.
- 19. A computerized method as in Claim 18 wherein said displays are publicly visible displays.
- 20. A computerized method as in Claim 19 wherein:
- said one or more criteria associated with individual messages include one or more demographic criteria relating to one or more types of people to which the message is to be shown; and

-said given display is a publicly visible display mounted on a vehicle; and

-said obtaining of information regarding the values for said criteria associated with a given display opportunity includes:

- determining the vehicle's temporary location as it moves;

- accessing a demographic database containing information on the number of people of one or more types available to view a showing of a message at each of a plurality of different locations, so as to determine an estimate of the number of people of one or more types available to view a showing of a message as a function of the vehicle's temporary location; and

-said scores are calculated as a function of the match between the demographic criteria associated with individual messages and the estimates of the number of people of one or more types available to view a showing of a message at the vehicle's temporary location.

-21. A computerized method as in Claim 18 wherein:

- said one or more criteria stored in association with a given message include one or more demographic criteria each concerning one or more types of people to which it is desired that the given messages be shown; and

- said information regarding the values for said criteria associated with a given display opportunity include an estimate of the number of one or more different types of people available to view the given display opportunity.

-22. A computerized method as in Claim 21 wherein said estimate of the number of one or more different types of people available to view the given display opportunity is determined, at least in

part, by a computerized estimate of the number of people of the one or more different types in a location associated with the given display opportunity based on sensor information received from that location within an hour of the display opportunity's showing of a message.

-23. A computerized method as in Claim 21 wherein the estimate of the number of one or more different types of people available to view the given display opportunity is determined, at least in part, by using a computerized database which includes an estimate of the number said one or more different types of people in each of a plurality of location at each of a plurality of times, to produce said estimate as a function of the location and time of the given display opportunity.